

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287  
Estimated average burden  
hours per response: 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 1. Name and Address of Reporting Person*   |  |  | 2. Issuer Name and Ticker or Trading Symbol              |  | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)           |  |
| <u>Chereau Frederic</u>                    |  |  | <u>aTYR PHARMA INC</u> [ <u>LIFE</u> ]                   |  | Director 10% Owner   |  |
| (Last) (First) (Middle)                    |  |  | 3. Date of Earliest Transaction (Month/Day/Year)         |  | <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) |  |
| <u>C/O ATYR PHARMA, INC.</u>               |  |  | <u>05/06/2015</u>  |  | <u>President &amp; COO</u>   |  |
| <u>3545 JOHN HOPKINS COURT, SUITE #250</u> |  |  | 4. If Amendment, Date of Original Filed (Month/Day/Year) |  | 6. Individual or Joint/Group Filing (Check Applicable Line)                          |  |
| (Street)                                   |  |  |  |  | <input checked="" type="checkbox"/> Form filed by One Reporting Person               |  |
| <u>SAN DIEGO CA 92121</u>                  |  |  |  |  | Form filed by More than One Reporting Person   |  |
| (City) (State) (Zip)                       |  |  |  |  |  |  |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) |   | 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) |            |       | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|-------|---|--|---|
|                                 |                                      |  | Code                           | V | Amount  | (A) or (D) | Price |   |  |   |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |     | 6. Date Exercisable and Expiration Date (Month/Day/Year) |                 | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) |                            | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|----------------------------|--|--|---|--|
|  |  |                                      |  | Code                           | V | (A)  | (D) | Date Exercisable   | Expiration Date | Title   | Amount or Number of Shares |  |  |   |  |
| Stock Option (right to buy)                | \$14   | 05/06/2015                           |  | A                              |   | 22,001   |     | (1)  | 05/06/2025      | Common Stock  | 22,001                     | (2)  | 22,001   | D   |  |

Explanation of Responses:

1. The shares subject to this option shall vest and become exercisable in 48 equal monthly installments beginning on May 6, 2015, such that this option is fully exercisable on May 6, 2019. This option is subject to accelerated vesting upon termination without cause upon a change of control of the Issuer.
2. Not applicable.

Remarks:

/s/ Nancy Krueger, as  
Attorney-in-Fact 05/08/2015

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.